AGRI., FOREST, CO-OPN. & MARKETING

870. A total of 1,62,725 tons of compost was manufactured during the year.

871. Intensive drive was launched to make the conservative cultivator manure minded. In addition to demonstration plots arranged on Government Farms, a net work of memorial demonstration plots were arranged to exhibit the manuring of crop both under rain-fed and irrigated condition on the cultivators field.

872. During the year, 9,712 acres were brought under Japanese method of paddy cultivation in Bellary and Gangawati areas.

873. As usual, crop competitions were organised throughout the Division to create healthy competitive spirit amongst the cultivators.

874. The 8th Annual Vanamahotsava was celebrated during July 1957.

875. To disseminate the latest scientific knowledge in Agriculture, Refresher Training classes and Farmers' Training classes were arranged. Exhibition and Farmers' Day were conducted, depicting the several aspects of Agricultural activities in the form of photos, charts, models and graphs.

876. As a result of various campaigns sponsored by the Department of Agriculture to achieve increased production, an area of roughly about 20,58,000 acres was brought under improved methods of cultivation and an additional production of more than 37,000 tons of Agricultural produce.

(iii) Forest.

877. The forest area of the State was 13,556·68 square miles at the end of the year. Out of this total forest area, 12,111·81 square miles were in charge of the Forest Department and 1,444·87 square miles in charge of the Revenue Department.

Free Grazing

878. Free grazing was allowed in all the Divisions of the old Mysore State (excepting in Bellary Division) except in areas under regeneration and worked coupes. In Bellary, Gulbarga, Kollegal and South Kanara Divisions cattle were allowed to graze on prepaid licenses.

879. In Belgaum Circle 277·73 square miles of forests were closed for grazing. About 2,994·24 square miles of forests were kept open for grazing throughout the year for all animals while 1,445·79 square miles were open to grazing for non-browsers only. In Coorg Circle except in Mysore Division where free grazing was permitted, all forest areas excepting the younger plantations and elephant grazing grounds were open for grazing on prepaid licenses.

880. The total revenue under grazing for the year was Rs. 1,06,296.

881. This devastating disease continued to cause heavy damage to sandalwood trees in the Districts of Mysore, Coorg, Hassan, Tumkur, Bangalore and Kolar. To prevent the spread of the disease, sandal trees attacked by spike and containing heartwood were uprooted and removed to the koties and others with no heartwood uprooted and burnt on the spot. Spike disease

882. Bison, sambur and pigs caused damages by trampling, debarking and uprooting of plants in the younger teak plantations. Wild elephants caused some damage specially to young teak plantations. Wild-boar caused some havoc in Ayanur Range of Shimoga Division, Sandur Range of Bellary Division and in Bidar Range of Gulbarga Division. Animal pests

883. In Gulbarga Division and Kanara Western Division porcupines caused damage to young plants.

884. Defoliater attack was extensive and also severe in all the teak areas in Shimoga Circle and did much damage. The only areas which escaped damage were the 1st and 2nd year old plantations at Gilalgundi of Karadibetta Range, Sagar Division. Insects

885. There was no change in the systems of management of forests in the four forest circles *viz.*, Belgaum, Bellary, Shimoga and Coorg. Sylviculture

(a) Evergreen Forests :—In Shimoga, natural regeneration of evergreen species like Poeciloneuron indicum, Dipterocarpus indicus, Callophyllum tomentosum etc., were remarkably good in areas where the canopy was opened up by fellings.

(b) Moist Deciduous Forests :—In general, natural regeneration of teak has been very poor whereas that of

AGRI., FOREST, CO-OPN. & MARKETING

its associates has been good throughout except in Kakankote State forest and the Masal Valley of Coorg Circle where natural regeneration of Pterocarpus marsupium, Terminalia tomentosa and Dalbergia Latifolia was absent along with teak. Regeneration of Bambusa arundanasia and Dendrocalamus strictus was abundant in Bhadravathi Division of Shimoga Circle where flowering has been occurring for the last few years.

(c) Dry Zone:—In Bellary Circle natural regeneration of Hardwickia binata, Shorea talura, Anogeissus latifolia and bamboos was good. Hardwickia binata regeneration was specially good in Bellary Division.

Artificial Regeneration

886. In the evergreen forests of North Coorg Division, an area of 242 acres was planted up with matchwood species and Anacardium occidentale.

887. In the teak growing areas artificial regeneration of teak was effected by raising teak plantations as per prescriptions of the working plans for the Belgaum Circle, and as per plan of works in the others. The usual technique of planting teak stumps in clearfelled and burnt areas was followed.

888. Eucalyptus plantations were raised around Bhadravathi with the view to meet future fuel supplies to Mysore Iron and Steel Works.

889. Casuarina was planted in the coastal areas of Karwar, and in other places Eucalyptus was the main fuel species raised.

Sandalwood

890. The practice of dibbling sandalwood in bushes and sowing sandalwood and host seeds on mounds along the inspection paths of plantations was continued. Sandalwood was also introduced in some teak areas in maidan with teak at every 6th stake.

Agri-Sylviculture.

891. The Agri. Sylvi. method was practised only in Coorg and Belgaum Circles over a total area of 1,892—59 acres in the teak and miscellaneous species plantations.

Vanamahotsava.

892. Seeds of economically important species like Pongamia glabra, Anacardium occidentale etc., were supplied to an extent of 3,578 pounds. Supply of seedlings of the above species for Vanamohotsava purpose amounted to 11,70,500 seedlings.

Exploitation

893. *Timber*:—Exploitation of timber was carried out mainly by departmental agency and under prescriptions of

the various working plans in force. The high forest compartments in the Kanara Divisions of Belgaum Circle were worked through the agency of the logging contractors to meet the essential demands from Railways and other indentors and also for depot sale. Teak mill and scantling pieces were extracted from logging areas and they were exclusively utilised for sawing. In Coorg Circle timber was extracted departmentally and brought to depots for supply to the Railways, Government Departments and other indentors and also for sale in auction.

894. In Bhadravathi, Shimoga and Sagar Divisions of Shimoga Circle, exploitation of timber was confined to forests going under submersion which are therefore being cleared and similarly in other areas where displaced cultivators are being rehabilitated or the irrigation channels bring forest areas under irrigation.

895. Timber brought to the sale depots departmentally was mainly supplied to the Railways, other Government departments including the Defence department, Industrial concerns at negotiated prices or at sanctioned schedule rates.

896. The total quantities of timber and poles disposed of were 33,94,669 logs of timber and 29,791 poles.

897. About four lakhs of sleepers and 1,000 tons of special size sleepers were supplied to the Southern Railway.

898. Bamboos both Bambusa arundinacea or the big bamboo and Dendrocalamus strictus or the small bamboo were extracted departmentally for supply to the Mysore Paper Mills and to other Government Departments. Bamboos

899. The following are the details of bamboos and other minor forest products removed from the forests by purchasers, free grantees and privilege holders :—

	Purchasers	Free grantees	Right and Privilege holders
	Nos.	Nos.	Nos.
Bamboos	62 97,891	34,110	89,425
Sheebu	29,31,599	9,150	42,550
Medars	19,11 719	600	4,585
Bamboo stakes, battens ...	7,76,7[illegible]7	...	...
Vate Bamboos	80,507	...	...
Garte bamboos ...	3,20,828	...	...
Ara-kaddy	100 head loads	...	...
Canes	6,59,328 lbs.	...	2,48,000

AGRI., FOREST, CO-OPN. & MARKETING

900. In Belgaum circle, 35 coupes were allotted to 17 forest co-operative societies, out of which one coupe in Kanara Northern Division was given to a society for extraction of Government depots and the remaining 34 coupes were sold to them at upset (negotiated) prices for a total consideration of Rs. 4,33,851.

Research and Experiments

901. The Government Central Wood Working Factory at Tumkur continued to function throughout the year.

902. Research work was mainly carried out in the six Silvicultural Research Centres situated in different types of forests; Evergreen, Moist Deciduous, Deciduous and Dry-Deciduous. On a minor scale some research work was also carried out by the Divisional Forest Officers in their Divisions.

103. A planting bar was designed after American model for increasing planting efficiency and minimising the cost of planting in medium textured soils. Soil sampling cans were purchased to enable sampling soils for soil moisture evaluation. Weather instruments were installed in the Sylvicultural Research Garden, Mudigere to record daily maximum and minimum temperatures and relative humidity.

904. Experimental plots were laid out in young Eucalyptus and older Casuarina plantations and also young teak plantations to study their effect on the growth and mortality of trees and seedlings and also to determine if there is deficiency in the soils to which the nutrients were applied. The experiments were under observation.

905. In order to develop suitable technique for afforestation of the arid tracts, experiments were conducted on the optimum depth of trenches.

906. *Special Research Work on the Spike Disease of Sandal Wood in Coorg Circle.*—This fatal disease has been threatening the extinction of sandalwood, a vital forest commodity and one in which the Mysore Forest Department holds virtual monopoly. Research work aiming at the eradication of the disease was being carried on at the Forest Research Laboratory, Malleswaram, Bangalore.

907. *Development Schemes.*—The following schemes were implemented under the Second Five Year Plan during 1957-58 :—

1 Scheme for Rehabilitation of Degraded Forests (Afforestation of waste lands).
2 Forest Rehabilitation scheme-Review of the unorganised forests of Kanara.
3 Lac cultivation.
4 Soil Conservation Schemes.
5 Scheme for Promotion of Secondary Timbers.
6 Preservation of Wild Life.
7 Establishment of Wet Nurseries
8 Scheme for plantations of Commercial Timber (Teak).
9 Creation of Industrial Plantations (Geru).
10 Matchwood plantations.
11 Development of Panchayat Forests.
12 Communications and Buildings.
13 Opening of soil Conservation Demonstration Centres.
14 Regional Arboratum of oil bearing trees.

Biligiri Rangan Temple Forest.

908. The Biligiri Rangan Temple forest comprises of 22,640 acres 12 guntas or 35·375 square miles and continued to be under the Departmental management.

Elephants

909. The number of elephants working in different divisions and circles were :—

Mysore Division	...	...	20
South Kanara	...	...	4
South Coorg	...	...	54
North Coorg	...	...	8
Shimoga Circle	...	...	27

910. From South Coorg Division one elephant calf was presented to U.S.A. and two were sold to a Zoo in Turkey.

Wild Life Preservation.

911. Protection of Wild-life continued to be one of the important activities of the Department. In addition to general protection, the Venugopal Wild-life Park of which the Bandipur Game Sanctuary is the *Sanctum Sanctorum*, the Jauger Valley Wild-life park, the Nagerhole Game Sanctuary, the Dandeli Sanctuary, Ranganathittoo Bird Sanctury and the several tiger preserves were maintained.

Dandeli Game Sanctuary.

912. The Dandeli Game Sanctuary comprises of the Kulgi and Virnoli Ranges of Kanara North Division and extends over an area of 80 square miles. Efforts were made to develop the sanctuary by creating a sort of artificial setting to attract wild animals to come to certain spots frequently and also by affording facilities to the

AGRI., FOREST, CO-OPN. & MARKETING

tourists visiting the game sanctuary. Artificial salt licks were created near the water holes and near Kanshirda lake.

913. It was observed that during the year sambhar, chital and bison were on the increase even though there were considerable destruction of chital by wild-dogs.

Bandipur Game Sanctuary (Coorg Circle)

214. The Bandipur Game Sanctuary (22 square miles) is the *Sanctum Sanctorum* of the bigger Venugopal Wild Life Park which covers 310 square miles of forest in Mysore Division.

915. Bandipur Game Sanctuary has attracted large number of visitors both from within and outside India.

Ranganthittoo Bird Sanctuary.

916. There was no alteration in the area of the islands consituting the Bird Sanctuary at Ranganthittoo, near Srirangapatna, which remained at 188·06 acres. Between June and October, the area attracts migratory aquatic birds. Planting of fruit and flower trees in the Sanctuary were continued.

Bababudangiri Wild Life Park.

917. The arrangements for the maintenance and protection of Bababudangiri wild life park with an area of 61·29 square miles in Bhadravathi Division was continued unaltered.

Wild-life week

918. Wild-life Week was celebrated during the year. An illustrated pamphlet with literature explaining the importance of wild life for maintaining the balance of nature and the need for the preservation of wild life, was printed and distributed to the public.

(iv) Co-operation

(*1st July* 1957 *to* 30*th June* 1958)

919. Consequent on the formulation of several schemes of co-operative development under the Second Five-Year Plan during the year, the Co-operative Movement recorded significant increase in the number of co-operative societies, their membership, share capital, reserve and other funds, total working capital, etc., during the year as follows :—

	As on 30-6-1957	As on 30-6-1958
1. Number of societies ...	12,613	12,960
2. Number of members ..	18,17,093	19,15,088
	Rs	Rs.
3. Paid up share capital ...	6,00,47,802	8,79,62,000
4. Deposits held at the end of the year ...	14,28,48,802	17,22,27,000
5. Loans due to Government ...	2,11,77,049	3,07,01,000
6. Loans due to Central institutions ...	9,94,62,719	22,74,21,000
7. Reserve and other funds ...	2.54,11,294 (Reserve Fund)	6,85,55,000
8. Total working capital ...	39,42,83,127	58,68 66,000
9. Loans issued during the year ...	28,52,07,783	40,44,76,000
10. Loans recovered during the year ...	25,25,29855	32,24 13,000
11. Loans outstanding during the year ...	16,43,80,241	34,27,61,000
12. Loans overdue ...	2,81,98,798	4,60,33,000
13. Net profits ...	76,34,256	82,41,000